

What is claimed is:

1. A composition comprising an oligonucleotide 8 to 30 nucleotides in length which is targeted to a nucleic acid encoding human ras, and which is capable of inhibiting ras expression, and at least one chemotherapeutic agent.

2. The composition of claim 1, wherein said oligonucleotide is targeted to mRNA encoding human H-ras.

3. The composition of claim 1, wherein said oligonucleotide is targeted to mRNA encoding human Ki-ras.

10 4. The composition of claim 1, wherein said oligonucleotide is targeted to mRNA encoding human N-ras.

5. The composition of claim 1, wherein said oligonucleotide is targeted to a 5' untranslated region, translation initiation site, coding region or 3' untranslated region of an mRNA encoding human N-ras.

6. The composition of claim 4, wherein said oligonucleotide has the sequence shown in SEQ ID NO: 2.

7. The composition of claim 1, wherein said oligonucleotide comprises at least one backbone modification.

20 8. The composition of claim 1, wherein at least one of the nucleotide units of said oligonucleotide is modified at the 2' position of the sugar.

9. The composition of claim 1, wherein said oligonucleotide is a chimeric oligonucleotide.

10. The composition of claim 1, wherein said chemotherapeutic agent is selected from the group consisting of daunorubicin, daunomycin, dactinomycin, doxorubicin, epirubicin, idarubicin, esorubicin, bleomycin, magosfamide, ifosfamide, cytosine arabinoside, bis-chloroethylnitrosurea, busulfan, mitomycin C, actinomycin D, mithramycin, prednisone, hydroxyprogesterone, testosterone, tamoxifen, dacarbazine, procarbazine, hexamethylmelamine, pentamethylmelamine, mitoxantrone, amsacrine, chlorambucil, 10 methylcyclohexylnitrosurea, nitrogen mustards, melphalan, cyclophosphamide, 6-mercaptopurine, 6-thioguanine, cytarabine, 5-azacytidine, hydroxyurea, deoxycogformycin, 4-hydrosyperoxyphosphoramide, 5-fluorouracil (5-FU), 50fluorodeoxyuridine (5-FudR), methotrexate (MTX), colchicine, 15 taxol, vincristine, vinblastine, etoposide (VP-16), trimetrexate, irinotecan, topotecan, gemcitabine, teniposide, cisplatin and diethylstilbestrol (DES).

11. The composition of claim 1 in a pharmaceutically acceptable carrier.

20 12. A method of modulating the expression of human ras comprising contacting tissues or cells containing a human ras gene with an effective amount of the composition of claim 1, whereby expression of ras is modulated.

13. A method of inhibiting the proliferation of cancer 25 cells comprising contacting cancer cells with an effective amount of the composition of claim 1, whereby proliferation of the cancer cells is inhibited.

14. The method of claim 13 wherein the cells are blood cells.

15. The method of claim 13 wherein the cells are peripheral blood mononuclear cells.

16. A method of preventing or treating a condition arising from the activation of a ras oncogene comprising 5 contacting an animal suspected of having a condition arising from the activation of a ras oncogene with an effective amount of the composition of claim 1, whereby said condition is prevented or treated.

17. The method of claim 16 wherein said activation of 10 a ras oncogene is abnormal expression of a ras oncogene.

18. The method of claim 16 wherein said condition is a hyperproliferative condition.

19. The method of claim 16 wherein the condition is cancer.

15           20. The method of claim 16 wherein the condition is colorectal cancer, melanoma, liposarcoma, mesothelioma, sarcoma, colon cancer, or pancreatic cancer.